UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,860	12/10/2003	Torsten Berger	SNS-017	8039

51414 7590 02/21/2006

GOODWIN PROCTER LLP
PATENT ADMINISTRATOR
EXCHANGE PLACE
BOSTON, MA 02109-2881

EXAMINER	
CASCHERA, ANTONIO A	

ART UNIT	PAPER NUMBER
2676	

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/733,860	BERGER, TORSTEN	
	Examiner	Art Unit	
	Antonio A. Caschera	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

.DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 5, 6, 10, 11, 30-35, 37 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Dumesny et al. (U.S. Publication 2002/0154132 A1).

In reference to claims 1, 10 and 30, Dumesny et al. discloses a user interface and computer system operating the user interface, for applying a texture to a 3D graphic object and modifying the texture using several techniques (see paragraph 9, lines 1-5, paragraph 13, lines 1-7 and paragraph 76, lines 7-11). Dumesny et al. further discloses a "widget" type graphical user interface element which represents user selected "click-down" and endpoints (see paragraphs 56-58 and #155, 156, 158 of Figures 15A & 15B) that allows a user to manipulate the mapping of texture in the texture space. Note, the user is allowed to directly manipulate texture data which corresponds to 3D object polygons in Dumesny et al., therefore the Office interprets such user-selected adjustments to inherently disclose the user defining a region of the 3D object to adjust and map texture thereto. Dumesny et al. further discloses the user interface comprising a set of tool buttons, allowing for the user to modify a texture mapping using various techniques, these techniques include translation, rotation and scaling (see paragraph 48, 51 and 56 along with Figures 11a-b, 13a-b and 15a-b). Dumesny et al. also discloses an alternate embodiment of

implementing the texture mapping and 3D graphical object windows together thereby adjusting texture objects within the 3D object space itself (see paragraph 74). Therefore, the combination of the "widget" GUI element and adjusting of texture objects within 3D object space of Dumensy et al. is interpreted by the Office as functionally equivalent to the user GUI element rendered in 3D object space of Applicant's claims. Further, the Office interprets this "widget" element in Dumesny et al. to inherently comprise of some sort of "active location" as recited in Applicant's claims, since in order for the element to be "clicked and dragged" it must have an area of selection. Further, in reference to claim 10, the Office interprets the user interface of Dumesny et al. equivalent to a "haptic graphical user interface" because mouse movements determine the adjustment and selection of adjustment mode by clicking and/or dragging mouse functions (see paragraph 43, lines 1-11 and paragraph 49). Also, in reference to claim 30, Dumesny et al. discloses a storage memory medium for storing code to perform the texture mapping/adjusting techniques above (see paragraph 75, lines 7-20 and paragraph 76). Further, the Office interprets the computer system operating the user interface above to inherently comprise of some sort of processor for reading and executing the above code.

In reference to claims 2, 3, 11, 34, 35, 37 and 38, Dumesny et al. discloses all of the claim limitations as applied to claims 1 and 10 respectively above. Dumesny et al. further discloses the "widget" user interface element comprising a rotation point from which texture is rotated about (see paragraph 56 and #153 of Figure 15B), along with allowing the user to "click and drag" the "widget" element around the texture space for moving the texture about the rotation point (see paragraphs 57-58 and Figure 15B). Further, in reference to claims 34 and 35, since the texture is capable of being moved about the rotation point, the Office interprets such a

feature functionally equivalent to modifying the orientation of texture. Even further, in reference to claim 38, the rotation point and "widget" of Dumesny et al. perform different functions directed towards manipulating the texture mapping.

In reference to claim 5, Dumesny et al. discloses all of the claim limitations as applied to claim 1 above in addition, Dumesny et al. discloses the texture as an image or a 2D array of pixel information (see paragraph 4, lines 1-4).

In reference to claim 6, Dumesny et al. discloses all of the claim limitations as applied to claim 1 above in addition, Dumesny et al. discloses the texture as a tiled pattern (see paragraph 4, lines 1-6).

In reference to claim 31, Dumesny et al. discloses all of the claim limitations as applied to claim 30 above. Note, the Office interprets Dumesny et al. to inherently comprise of some sort of "selection module" adapted to select one of the at least one active locations of the user interface element based on the location of the object and cursor since Dumesny et al. discloses a computer system implementing the user interface and since the user is capable of adjusting the texture mapping by selecting the mode of adjustment from translation, rotation and scaling using a mouse cursor, button on the user interface and a "widget" interface element (see paragraph 43, lines 1-11, paragraphs 49 and 56-58).

In reference to claim 32, Dumesny et al. discloses all of the claim limitations as applied to claim 31 above. Note, the Office interprets Dumesny et al. to inherently comprise of some sort of "repositioning module" adapted to move the cursor to a 3D position one of the at least one active locations of the user interface since Dumesny et al. discloses a computer system implementing the user interface and since the user is capable of adjusting the texture mapping by

selecting the mode of adjustment from translation, rotation and scaling using a mouse cursor, button on the user interface and a "widget" interface element (see paragraph 43, lines 1-11, paragraphs 49 and 56-58).

In reference to claim 33, Dumesny et al. discloses all of the claim limitations as applied to claim 30 above. Note, the Office interprets the user interface of Dumesny et al. equivalent to a "haptic graphical user interface" comprising "haptic elements" because mouse movements determine the adjustment and selection of adjustment mode by clicking and/or dragging mouse functions (see paragraph 43, lines 1-11 and paragraph 49).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 4 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumesny et al. (U.S. Publication 2002/0154132 A1) in view of Watkins (The Maya 4.5 Handbook, Watkins, Adam. Charles River Media, Inc. (c) 2003. made available 12/31/2002. pgs. 332-336).

In reference to claims 4 and 36, Dumesny et al. discloses all of the claim limitations as applied to claim 1 above. Dumesny et al. does not explicitly disclose the GUI element comprising a first active location for translating texture, a second active location for rotating texture and a third active location for scaling texture. Watkins discloses a guide for using the

graphics program named Maya whereby Watkins discloses a method for creating a graphical user interface element that establishes a menu for a star like "widget" (see pages 332-333 and Figure B.22). Watkins explicitly discloses drawing the "widget" menu in 3D space (see Figure B.25). Watkins also discloses the capability of fully customizing the options in the menu which include texturing commands such as extrude, revolve, EP and CV curve tools (see pages 332-336 and Figures B.21-B.26). It would have been obvious to one of ordinary skill in the art to implement the "widget" type menu in a 3D space of Watkins with the user interface texture mapping/adjusting techniques of Dumesny et al. in order to create a menu of favorite, most commonly used or most appropriate/convenient tools, making these tools easily accessible to the user (see page 332, 2nd paragraph of Watkins). Further, in reference to claim 36, the Office interprets the extrude and EP, CV curve tools as providing functionality equivalent to the scaling function of Applicant's claim. Even further however, the capability of adding multiple functions to the "widget" menu of Watkins provide a fully customizable interface element even allowing for scaling, rotating and moving functions to be combined together in one GUI element.

3. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumesny et al. (U.S. Publication 2002/0154132 A1) in view of Leather et al. (U.S. Patent 6,707,458 B1).

In reference to claim 7, Dumesny et al. discloses all of the claim limitations as applied to claim 1 above. Dumesny et al. does not explicitly disclose the texture as an embossing pattern however Leather et al. does. Leather et al. discloses a method and apparatus for texture mapping using techniques in which the texture pattern maybe bump mapped to perform embossing effects (see column 4, lines 38-40 and columns 9-10, lines 57-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the texturing techniques

of Leather et al. with the user interface texture mapping/adjusting techniques of Dumesny et al. in order to produce a more realistic texture tiled surface, eliminating the ability of a viewer of the displayed textured to notice any repeating patterns in the texture (see column 4, lines 41-45 of Leather et al.).

In reference to claims 8 and 9, Dumesny et al. and Leather et al. disclose all of the claim limitations as applied to claim 7 above. Leather et al. discloses setting certain specific texture tiling parameters (see column 16, lines 24-67), which the Office interprets as inherently disclosing adjusting an embossing height and depth normal to the surface of the object. Further, the effect of embossing inherently comprises height and depth associated with it including some sort of height and/or depth parameters therefore, the ability to emboss textures is inherent in Leather et al. as these parameters, height and depth, directly effect the output of the embossing technique.

4. Claims 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumesny et al. (U.S. Publication 2002/0154132 A1) in view of Yanof et al. (U.S. Patent 5,371,778).

In reference to claim 23, Dumesny et al. discloses a user interface and computer system operating the user interface, for applying a texture to a 3D graphic object and modifying the texture using several techniques (see paragraph 9, lines 1-5, paragraph 13, lines 1-7 and paragraph 76, lines 7-11). Dumesny et al. further discloses a "widget" type graphical user interface element which represents user selected "click-down" and endpoints (see paragraphs 56-58 and #155, 156, 158 of Figures 15A & 15B) that allows a user to manipulate the mapping of texture in the texture space. Note, the user is allowed to directly manipulate texture data which corresponds to 3D object polygons in Dumesny et al., therefore the Office interprets such user-

selected adjustments to inherently disclose the user defining a region of the 3D object to adjust and map texture thereto. Dumesny et al. further discloses the user interface comprising a set of tool buttons, allowing for the user to modify a texture mapping using various techniques, these techniques include translation, rotation and scaling (see paragraph 48, 51 and 56 along with Figures 11a-b, 13a-b and 15a-b). Dumesny et al. also discloses an alternate embodiment of implementing the texture mapping and 3D graphical object windows together thereby adjusting texture objects within the 3D object space itself (see paragraph 74). Therefore, the combination of the "widget" GUI element and adjusting of texture objects within 3D object space of Dumensy et al. is interpreted by the Office as functionally equivalent to the user GUI element rendered in 3D object space. Further, the Office interprets this "widget" element in Dumesny et al. to inherently comprise of some sort of "active location" as recited in Applicant's claim, since in order for the element to be "clicked and dragged" it must have an area of selection. Dumesny et al. does not explicitly disclose modifying a transformation matrix used in mapping points on the surface of the object to texture however Yanof et al. does. Yanof et al. discloses a display and adjustment of 3D projections using a transformation matrix whereby if a change of viewing angle of the projection is made, the transformation matrix is modified (see column 2, lines 39-55 and column 7, lines 1-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the transformation techniques of Yanof et al. with the texture adjustment/mapping techniques of Dumesny et al. in order to provide a display system wherein a real-time adjustment of different views of a 3D object is performed (see column 2, lines 29-36 of Yanof et al.).

In reference to claim 24, Dumesny et al. and Yanof et al. disclose all of the claim limitations as applied to claim 23 above. Dumesny et al. further discloses rendering and displaying the 3D object based upon the modified texture mapping technique (see paragraph 9, lines 5-8).

In reference to claim 25, Dumesny et al. and Yanof et al. disclose all of the claim limitations as applied to claim 24 above. Dumesny et al. further discloses rendering and displaying the 3D object based upon the modified texture mapping technique (see paragraph 9, lines 5-8). Yanof et al. also discloses displaying an image including 4 additional view ports which "keep" depth values or k values consistent by showing distortions in 3D object faces (see column 4, lines 19-45 and Figure 2).

In reference to claim 26, Dumesny et al. and Yanof et al. disclose all of the claim limitations as applied to claim 25 above in addition, Yanof et al. discloses generating image volume data in the form of voxels (see column 3, lines 62-67).

In reference to claim 27, Dumesny et al. and Yanof et al. disclose all of the claim limitations as applied to claim 25 above in addition, Yanof et al. discloses an editing means enabling an operator to make an effective removal of unwanted voxels from the display region (see column 5, lines 17-30). Note, the Office interprets Yanof et al. to inherently disclose editing these voxels based upon an activation of a user signal as Yanof et al. further discloses using a cursor control means to move a cursor on the display (see column 2, lines 54-55).

In reference to claim 28, Dumesny et al. and Yanof et al. disclose all of the claim limitations as applied to claim 27 above. Note, the Office interprets Yanof et al. to inherently disclose editing these voxels based upon an activation of a user signal as Yanof et al. further

discloses using a cursor control means to move a cursor on the display (see column 2, lines 54-55) and a cursor positioning means such as a mouse or trackball (see column 8, lines 35-38) which comprise of buttons to click and release.

5. Claims 12-16, 18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumesny et al. (U.S. Publication 2002/0154132 A1) in view of Brown (U.S. Patent 5,461,709).

In reference to claim 12, Dumesny et al. discloses all of the claim limitations as applied to claim 10 above. Dumesny et al. does not explicitly disclose haptic feedback comprising a gravity well associated with an active location however Brown does. Brown discloses a system for supplying input data establishing the location of data points in a model space for a 3D CAD design application (see column 1, lines 5-7 and column 2, lines 5-8). Brown discloses the ability to move the cursor close to an indexed point whereby a "sweet spot" of a few pixels wide is established near this indexed point and if the cursor is moved within this, "sweet spot" the cursor is locked into precisely a horizontal or vertical position with the indexed point (see column 9, lines 40-46). Note, the Office interprets the "sweet spot" of Brown functionally equivalent to the "gravity well" of Applicant's claim. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the data point location techniques of Brown with the texture adjusting/mapping techniques of Dumesny et al. in order to provide an easier and more user-friendly interface, employing a sophisticated drawing aid based on the interpretation of the user controlled cursor, supplying extensive feedback control to the user (see column 3, lines 22-34 of Brown).

In reference to claim 13, Dumesny et al. discloses all of the claim limitations as applied to claim 10 above. Dumesny et al. does not explicitly disclose haptic feedback comprising a haptic constraint however Brown does. Brown discloses a system for supplying input data establishing the location of data points in a model space for a 3D CAD design application (see column 1, lines 5-7 and column 2, lines 5-8). Brown discloses the ability to move the cursor close to an indexed point whereby a "sweet spot" of a few pixels wide is established near this indexed point and if the cursor is moved within this, "sweet spot" the cursor is locked into precisely a horizontal or vertical position with the indexed point (see column 9, lines 40-46). Note, the Office interprets the "sweet spot" of Brown functionally equivalent to the "gravity well" of Applicant's claim. Brown further discloses the user to place a data point at the current position within the "sweet spot" and lock the point thereby allowing the user to snap to another item while allowing the above constraint, keeping the locked point aligned, to apply (see column 9, lines 59-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the data point location techniques of Brown with the texture adjusting/mapping techniques of Dumesny et al. in order to provide an easier and more user-friendly interface, employing a sophisticated drawing aid based on the interpretation of the user controlled cursor supplying extensive feedback control to the user (see column 3, lines 22-34 of Brown).

In reference to claim 14, Dumesny et al. and Brown disclose all of the claim limitations as applied to claim 13 above in addition, Brown discloses constraining a "snap to" cursor movement to a current plane (see column 15, lines 40-46) which the Office interprets as

inherently disclosing constraining cursor movement to the surface of an object as a specific plane makes up the surface of an object (see column 15, lines 26-34 of Brown).

In reference to claim 15, Dumesny et al. and Brown disclose all of the claim limitations as applied to claim 13 above in addition, Brown discloses constraining a "snap to" cursor movement to a current plane (see column 15, lines 40-46) which the Office interprets as inherently disclosing constraining cursor movement to a user defined region (see column 15, lines 26-34 of Brown).

In reference to claim 16, Dumesny et al. and Brown disclose all of the claim limitations as applied to claim 13 above in addition, Brown discloses the ability to move the cursor close to an indexed point whereby a "sweet spot" of a few pixels wide is established near this indexed point and if the cursor is moved within this, "sweet spot" the cursor is locked into precisely a horizontal or vertical position with the indexed point (see column 9, lines 40-46). Note, this locked to a horizontal or vertical position of Brown is interpreted as equivalent to being constraint to an axis of Applicant's claim (see Figure 7 of Brown).

In reference to claim 18, Dumesny et al. and Brown disclose all of the claim limitations as applied to claim 13 above. Although Brown discloses constraining the cursor to an axis via a "sweet spot" and locking technique (see claim 16 above), neither Dumesny et al. nor Brown explicitly disclose constraining the cursor to a loop. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to constrain the cursor to any geometric figure including a circular shape or loop. Applicant has not disclosed that constraining the cursor to a loop provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected

Applicant's invention to perform equally well with the axis constraint of Brown because the exact restraints put on the movement of the cursor solely magnifies the amount of feedback to the user provided by the system and hence the level of necessary feedback would be chosen as preferred and best suited to the application at hand. Therefore, it would have been obvious to one of ordinary skill in this art to modify the combination of Dumesny et al. and Brown to obtain the invention as specified in claim 18.

In reference to claims 20-22, Dumesny et al. and Brown disclose all of the claim limitations as applied to claim 13 above. Dumesny et al. further discloses a "widget" type graphical user interface element which represents user selected "click-down" and endpoints (see paragraphs 56-58 and #155, 156, 158 of Figures 15A & 15B) that allows a user to manipulate the mapping of texture in the texture space. Note, the user is allowed to directly manipulate texture data which corresponds to 3D object polygons in Dumesny et al.. Further, the Office interprets this "widget" element in Dumesny et al. to inherently comprise of some sort of "active location" as recited in Applicant's claims, since in order for the element to be "clicked and dragged" it must have an area of selection. Brown further discloses the user to place a data point at the current position within the "sweet spot" and lock the point thereby allowing the user to snap to another item while allowing the above constraint, keeping the locked point aligned, to apply (see column 9, lines 59-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the data point location techniques of Brown with the texture adjusting/mapping techniques of Dumesny et al. in order to provide an easier and more user-friendly interface, employing a sophisticated drawing aid based on the interpretation of the user controlled cursor supplying extensive feedback control to the user (see column 3, lines 22-

34 of Brown). Further note, it would have been obvious to one of ordinary skill in the art to modify the combination of Dumesny et al. and Brown in order to enable a haptic constraint ("locking" and "sweet spot" functions of Brown) when a certain texture adjustment method is selected (translation, rotation, scaling techniques of Dumesny et al.) in order to automatically provide the haptic constraint without making the user manually turn on/off the constraint.

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dumesny et al. (U.S. Publication 2002/0154132 A1), Yanof et al. (U.S. Patent 5,371,778) and further in view of Brown (U.S. Patent 5,461,709).

In reference to claim 29, Dumesny et al. and Yanof et al. disclose all of the claim limitations as applied to claim 23 above. Neither Dumesny et al. nor Yanof et al. explicitly disclose arming or disarming a haptic constraint however Brown does. Brown discloses a system for supplying input data establishing the location of data points in a model space for a 3D CAD design application (see column 1, lines 5-7 and column 2, lines 5-8). Brown discloses the ability to move the cursor close to an indexed point whereby a "sweet spot" of a few pixels wide is established near this indexed point and if the cursor is moved within this, "sweet spot" the cursor is locked into precisely a horizontal or vertical position with the indexed point (see column 9, lines 40-46). Note, the Office interprets the "sweet spot" of Brown functionally equivalent to the "gravity well" of Applicant's claim. Brown further discloses the user to place a data point at the current position within the "sweet spot" and lock the point thereby allowing the user to snap to another item while allowing the above constraint, keeping the locked point aligned, to apply (see column 9, lines 59-65). Brown discloses locking and unlocking the point using a lock button (see column 9, line 65). It would have been obvious to one of ordinary skill

in the art at the time the invention was made to implement the data point location techniques of Brown with the transformation techniques of Yanof et al. and texture adjusting/mapping techniques of Dumesny et al. in order to provide an easier and more user-friendly interface, employing a sophisticated drawing aid based on the interpretation of the user controlled cursor supplying extensive feedback control to the user (see column 3, lines 22-34 of Brown).

7. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumesny et al. (U.S. Publication 2002/0154132 A1), Brown (U.S. Patent 5,461,709) and further in view of Shahoian et al. (U.S. Patent 6,822,635 B2).

In reference to claims 17 and 19, Dumesny et al. and Brown disclose all of the claim limitations as applied to claims 16 and 18. Neither Dumesny et al. nor Brown explicitly disclose at least haptic detent active on an axis or loop of a cursor however Shahoian et al. does. Shahoian et al. discloses a haptic feedback touch control used to provide input to a computer system whereby a haptic effect, or detent is felt by the user when he/she uses the touch control with fingers (see columns 1-2, lines 66-1 and column 23, lines 51-58). Shahoian et al. further discloses the touch control to provide such detents in X and Y directions or axes (see column 23, lines 23-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the haptic detent techniques of Shahoian et al. with the data point location techniques of Brown and the texture adjusting/mapping techniques of Dumesny et al. in order to provide the user with a better sense of reality while controlling the computer system by translating the moving surface to a transition point between buttons and icons of the computer and user control device (see column 23, lines 56-58 of Shahoian et al.).

Response to Arguments

8. The addition of claims 34-38 is noted.

9. Applicant's arguments, see pages 11-14 of Applicant's Remarks, filed 12/21/05, with respect to the rejection(s) of claim(s) claims 1-33 under 35 U.S.C. 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dumesny and Watkins.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached at (571) 272-7691.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

571-273-8300 (Central Fax)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-2600.

aac
2/13/06

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600